FINAL INSPECTION
CALIFORNIA ENERGY COMMISSION | EFFICIENCY DIVISION

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"New Date" for 2013 Building Energy Efficiency Standards

The 2013 Building Energy Efficiency Standards will go into effect July 1, 2014. The new standards for residential and nonresidential buildings are expected to save 25 percent more energy than the previous *2008 Building Energy Efficiency Standards*. The standards apply to newly constructed buildings, as well as additions and alterations for existing buildings. In an effort to assist the building community comply with the standards, we have simplified and streamlined compliance documents. To provide the full features of the Public Domain Compliance Software, the original effective date for the standards of January 1, 2014, was extended. For more information on the *2013 Building Energy Efficiency Standards*, please visit www.energy.ca.gov/title24/2013standards.

Highlights of the 2013 Standards:

Residential

- Insulated hot water pipes to save energy and water, and reduce the time to deliver hot water to where it is needed
- Improved window performance to reduce heat loss in the winter and heat gain in the summer
- Whole-house fans to cool homes and attics with cool evening air instead of air conditioning
- "Solar-ready roof" construction, making it easier to install solar photovoltaic or solar thermal panels at a future date and giving the building owner flexibility

Nonresidential

- High-performance windows, sensors, and controls allowing buildings to use "daylighting" to avoid unnecessary use and expense of installed lighting
- Efficient process equipment in grocery stores, commercial kitchens, data centers, laboratories, and parking garages
- Advanced lighting controls to synchronize light levels with daylight and building occupancy, and to provide demand response opportunities from the utility or building owner
- "Solar-ready roof" construction makes it easier to install solar photovoltaic or solar thermal panels at a future date
- Occupant-controlled smart thermostats allowing an occupant to set and maintain a desired temperature and voluntarily participate in a utility's demand response programs
- Cool roof technologies

Training on the 2013 standards and compliance software is available around the state, at city and county building offices and utility training centers, and is conveniently available via the Energy Commission website. For training opportunities, please check the following websites:

- http://www.pge.com/pec
- http://www.sdge.com/eic
- http://www.socalgas.com/innovation/energy-resource-center
- https://www.sce.com/wps/portal/home/business/consulting-services/energy-education-centers
- https://www.smud.org/etc

Compliance and Enforcement of *2013 Energy Efficiency Standards*

The California Energy Commission and the Contractors State Licensing Board (CSLB) are working together to inform contractors about requirements under the new standards that affect the building industry. These agencies are committed to help contractors comply with requirements under the building code, provide training on code changes, assist contractors in filling out the appropriate forms, use compliance manuals, and increase energy efficiency savings statewide.

Traditionally, building departments and officials enforce building standards through plan-check and inspections. The CSLB has statutory enforcement authority and can fine and suspend a contractor's license. CSLB's Statewide Investigative Fraud Team (SWIFT) works to eliminate unlicensed contractors working in California. Undercover sting and sweep operations are conducted weekly around the state. Visit CSLB's website to learn more at www.cslb.ca.gov

Compliance with building regulations helps your clients, the economy and environment, and is good for your business. Studies from California energy agencies, organizations like the American Council for an Energy-Efficient Economy (ACEEE) , and the home performance association Affordable Comfort, Inc., have shown that energy-efficient buildings increase comfort for occupants (Comfort Reports, Energy Commission, P500-04-009; Valuation of Non-Energy Benefits, ACEEE No. A061). People are more productive working in buildings that function efficiently and comfortably. Upon the sale or lease of a building, energy-efficient buildings have greater market value.

Energy-efficient buildings have saved Californians $76 billion in energy costs since the first standards went into effect in 1978, while the population has almost doubled. No other state in the nation can boast this accomplishment. The building industry and contractors are on the frontlines of the effort to meet the Governor's Clean Energy Jobs Act (Proposition 39) targets. You are helping California meet these energy challenges, and the Energy Commission is here to support and help you!

Home Energy Rating System Update

The California Energy Commission is required by Public Resources Code Section 25942 to establish criteria for a statewide home energy rating system (HERS). The goal of the program is to create a consistent, accurate, and uniform rating system based on a rating scale that can differentiate the energy efficiency levels among California homes and prioritize the investment in cost-effective home energy efficiency measures. The HERS regulations and the HERS Technical Manual establish a systematic process for the delivery of California Whole-House Home Energy Ratings to provide California homeowners and prospective home buyers with information about the energy efficiency of the homes they live in or are considering for purchase. The ratings also provide a cost-effectiveness evaluation of the options that can improve the energy efficiency in these homes.

The HERS Building Performance Contractor is a special designation within the California Whole-House HERS program. A HERS building performance contractor is licensed by the CSLB as a Class B general building contractor. The building contractor is, or employs, a person certified as a California Whole-House HERS Rater, who has successfully completed an Energy Commission-approved HERS Building Performance Contractor training program and holds building science certifications from the Building Performance Institute (BPI). A HERS building performance contractor

evaluates the comfort, safety, and energy efficiency of a home to recommend energy-efficient measures that will result in the best possible performance of a home.

The training, certification, and quality assurance of HERS Raters conducting field verification and diagnostic testing services as well as HERS Raters conducting Whole-House Home Energy Ratings are administered by California Energy Commission-approved HERS Providers.

HERS Providers are approved by the Energy Commission based on requirements in the HERS Regulations that include the Providers' ability to create and maintain a registry and database available to Energy Commission staff, to train and certify HERS Raters, to create a quality assurance program and conduct quality assurance reviews on HERS Raters' work, and to report annually to the Energy Commission as required by the HERS Regulations. HERS Providers are approved to train and oversee Raters conducting HERS verification in residential newly constructed buildings, additions, and alterations, and for nonresidential HVAC (heating, ventilation, air conditioning) change-outs. Providers also train and certify Raters who conduct California Whole-House Home Energy Ratings. HERS Whole-House Raters perform the site inspection and data collection required to produce a home energy rating. HERS Verification Raters perform the field verification and diagnostic testing required for demonstrating compliance with the Title 24, Part 6 Energy Standards. To find a HERS Rater near you, please contact the Energy Standards Hotline or visit www.energy.ca.gov/HERS/index.html.

2013 Building Energy Efficiency Standards:

Early Adopter Program

The Energy Commission has established an "early adopter" program to assist those members of the industry who, for logistical or marketing purposes, would like to show compliance with the *2013 Building Energy Efficiency Standards* before the July 1, 2014, effective date.

Specifically, the Energy Commission is offering assistance to early adopters of the *2013 Building Energy Efficiency Standards* who are using the new certified residential compliance software programs (CBECC-Res or EnergyPro v6.0) or who are complying prescriptively. Until a HERS Provider is approved by the Energy Commission, registered certificates of compliance (CF-1R's) that are required by the *2013 Building Energy Efficiency Standards* will not be available.

Unregistered residential certificates of compliance can be submitted to building departments now. However, for obtaining a final permit, the unregistered CF-1R forms must be replaced with a HERS Provider-registered CF-1R form as soon as one or more HERS Providers are approved by the Energy Commission. It is anticipated that HERS Providers will be approved by the Energy Commission in the spring of 2014.

For early adopter assistance from the Energy Commission, please contact the Building Standards Implementation Office, at (916) 654-4064.

Acceptance Testing Requirements for Nonresidential Buildings

The Energy Commission adopted the Acceptance Test Technician Certification Provider (ATTCP) requirements as part of the *2013 Building Energy Efficiency Standards* in §10-103-A and §10-103-B. These providers will be responsible for training and certifying field technicians and contractors to perform the acceptance tests required for HVAC and lighting systems and controls in nonresidential buildings. The California Advanced Lighting Controls Training Program (CALCTP) has received interim approval as an ATTCP for lighting systems and controls. The Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), and the Testing, Adjusting and Balancing Bureau (TABB) have received interim approvals as ATTCPs for mechanical systems and controls.

All ATTCP interim approvals are contingent upon receipt and approval of a complete application by the Energy Commission. Once approved, ATTCPs will train and certify technicians and contractors to satisfy the minimum number of technicians and industry coverage thresholds outlined in §10-103-A and §10-103-B. When those thresholds have been met, field technicians and contractors will need to be trained and certified by an ATTCP to become an "Acceptance Test Technician" and to conduct acceptance testing for HVAC and lighting systems and controls under the *2013 Building Energy Efficiency Standards.*

For more information, please visit the Energy Commission's website at:
www.energy.ca.gov/title24/2013standards/provider_cert

Tools and information

Visit the Energy Commission's Efficiency Division online at www.energy.ca.gov/efficiency or go directly to the standards page at www.energy.ca.gov/title24/2013standards, for Building Energy Efficiency Standards, Reference Appendices, Compliance Manuals, the Alternative Calculation Method, training information and fact sheets.

The Energy Commission's Title 24 Energy Standards Hotline is available to answer questions and help you understand the California Energy Standards. Call toll-free in California: 800-772-3300, or outside California: 916-654-5106.

CALIFORNIA ENERGY COMMISSION

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Need Help? Energy Standards Hotline
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